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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
PAK, JOHN D	

ART UNIT	PAPER NUMBER
1616	

NOTIFICATION DATE	DELIVERY MODE
02/24/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/590,363	TORMO I BLASCO ET AL.	
	Examiner	Art Unit	
	John Pak	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claims 1-10 are pending in this application.

Claim 5 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 5 is improperly dependent on independent claim 1 by the way of claim 4. Claim 1 is directed to a mixture of compounds. Claim 5 is open to using the individual components of the mixture separately, i.e. not as a combined mixture. This makes dependent claim 5 improperly dependent on claim 1 (ultimately) since claim 1 is limited to the mixture.

Claim 5 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend on more than one claim simultaneously. Here, claim 5 depends on both claim 1 and claim 4 at the same time. See MPEP § 608.01(n). **Accordingly, the claim 5 has not been further treated on the merits**.

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 provides for the use of the compounds (I) and (II), but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 10 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim 10 will not be further examined on the merits because it is directed to non-statutory subject matter, the "use" of a substance.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites "100 g/100 kg." While the 100 g is understood to refer to the fungicidal mixture amount, it is not clear what the 100 kg is referring to. 100 kg of seed is one possibility but other interpretations are also possible. Clarification is needed.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4 and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of EP 988790 and WO 98/46607 in view of the acknowledged prior art, Goddard (US 4,180,569) and Duvert et al. (US 5,977,156).

EP 988790 discloses the fungicidal combination of triazolopyrimidine compounds that encompass applicant's formula I compound + vinclozolin. See paragraphs 1 and 9, wherein R^1 and R^2 together with the nitrogen represent a 4-methylpiperidine ring and L^1, L^2 and L^3 represent F. **Synergistic effect** from the combination is disclosed (paragraphs 3-4, 7, 15). Application to soil, **seeds** or directly onto plants is disclosed (paragraphs 15, 25). Protection of crops such as **rice**, vegetables, fruits, vines, and ornamentals against phytopathogenic fungi is disclosed (paragraphs 16-17). Control of phytopathogenic fungi of the genus **Pyricularia** is disclosed (paragraph 16, fifth line of

the paragraph). 0.001-2 kg/ha application rate of the triazolopyrimidine compounds is disclosed (paragraphs 18-19). Optimal rate of the second fungicidal active ingredient such as vinclozolin depends on the crop, level of infestation, and "can be readily determined by established biological tests." (paragraph 20). Ratio of 1:100 to 100:1 is disclosed for the two active fungicidal ingredients (paragraph 21). 0.001-99.9 wt% concentrations in various formulation types/carriers such as emulsions, solutions, powders, granules and other formulations are disclosed (paragraphs 22-35).

WO 98/46607discloses the fungicidal activity of applicant's triazolopyrimidine of formula I. See page 3, lines 5-15; Example 2 on page 20. The compound is disclosed to have enhanced systemic activity and enhanced toxicity to fungi (page 7, lines 8-11). Various solid and liquid formulations are disclosed (pages 13-17). **Combined use, including synergistic effect/use, with myriad other fungicides is disclosed** (page 17, line 7 to page 19, line 2; see in particular page 17, lines 12-13). Combination with another fungicide such as **vinclozolin** is disclosed (page 18, line 18). Application to soil, seeds or directly onto plants is disclosed (page 19, lines 2-19). Protection of crops such as rice, solanaceous crops, vegetables, legumes, apples, vines against phytopathogenic fungi is disclosed (paragraph bridging pages 11-12; page 19, lines 14-16). **Activity against "*Pyricularia grisea f.sp. oryzae*" is disclosed** (page 7, line 17). 0.5-95 wt% concentrations in various formulations/carriers such as emulsions, solutions, powders, granules and other formulations are disclosed (page 12, lines 14-32; see also

pages 13-15 for specific concentrations and formulation types). 0.01-10 kg/ha application rate is disclosed (page 15, lines 10-12).

Applicant acknowledges in the specification that both formula I and formula II compounds are known for their fungicidal properties, and triazolopyrimidine compounds that encompass applicant's formula I compound are known to be combined with vinclozolin (II) (specification page 1, line 21 to page 2, line 2).

Goddard and Duvert et al. are cited to merely show seed treatment application rates of other known fungicidal agents for rice seeds. Goddard discloses 16 to 500 g of active agent per 100 kg of rice seed (Example 8 on column 6). Duvert et al. disclose 2-200 g of fungicide per 100 kg of rice seeds (claim 32; column 5, lines 51-54).

Although the cited prior art does not expressly disclose the specific combination of applicant's formula I + vinclozolin, their combination as claimed by applicant would have been fairly suggested. First, both formula I compound and vinclozolin are known fungicides, known to protect valuable crop plants such as rice from phytopathogenic fungi. Second, both formula I compound and vinclozolin are known to be useful together in combination, resulting in at least increased efficacy or spectrum or synergism. Third, one having ordinary skill in the art would have been motivated to combine two fungicides in order to obtain the benefits of both fungicides. Fourth, one having ordinary skill in the art would have been motivated to adjust and optimize the concentration and application rates of the two component fungicides to arrive at the

mixture concentration and mixture application rates, based on the individual concentration and application rates taught by the prior art.

It is recognized that the cited prior art does not expressly disclose 1 to 1000 g of the claimed mixture per 100 kg of seed, rice seed or otherwise. However, one of ordinary skill in the art would have been able to review typical industry rice seed treatment amounts known for other fungicides to arrive at the claimed amounts (see Goddard and Duvert et al.). Even though the compounds in Goddard and Duvert et al. are different, EP 988790 is evidence that application amounts "can be readily determined by established biological tests." (paragraph 20).

Regarding dependent claim 7 that specifically recites *Pyricularia oryzae* as the phytopathogenic fungi to be controlled, the prior art teaching of the genus *Pyricularia*, *Pyricularia grisea f.sp. oryzae*, as well as control of phytopathogenic fungi in rice are deemed fairly suggestive of this feature.

Therefore, the claimed invention, as a whole, would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention and the claimed invention as a whole have been fairly disclosed or suggested by the teachings of the cited references.

In this regard, applicant's specification data has been reviewed for evidence of nonobviousness, but it must be noted that the data there falls short of being commensurate in scope with that of the claimed subject matter.

The test data disclosed on pages 11 and 12 were obtained by applying the active ingredients to leaves of rice seedlings at undeterminable actual application rates ("sprayed to runoff") by using 1 ppm or 4 ppm dilute solutions. The claims are open to any and all plants (though some dependent claims are limited to rice), any and all application amounts, concentrations, and proportions (though some dependent claims narrow these features), and any and all phytopathogenic fungi (though some dependent claims are limited to rice-pathogens or *Pyricularia oryzae*). In other words, the claims being examined here are not limited to using 1-4 ppm dilute solutions, applied to rice seedlings, to control only *Pyricularia oryzae*. There is no evidence that the data obtained under such limited conditions would transfer similarly to other concentrations, proportions, plant types, plant substrate (e.g. seeds per se), and phytopathogens. As each of these variables are expected to have an effect on the performance of active agents, limited comparative data such as applicant's cannot considered probative evidence for the entire scope of the claimed subject matter.

For these reasons, all claims must be rejected.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to John Pak whose telephone number is **(571)272-0620.** The Examiner can normally be reached on Monday to Friday from 8 AM to 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's SPE, Johann Richter, can be reached on **(571)272-0646**.

The fax phone number for the organization where this application or proceeding is assigned is **(571)273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John Pak/
Primary Examiner, Art Unit 1616